REMARKS

Claims 11-16 and 18-22 are pending in this application. Claim 11 is amended to recite that the crosslinked HA composition is stable in the subject for at least 8 weeks. This amendment is supported by the application and thus does not add new matter (*see, e.g.*, ¶¶ 113-116).

The Final Office Action of January 25, 2010 rejected all claims. The rejection is addressed below. The citations to the specification included throughout this response correspond to the paragraph numbers of the published application (US 2005/0136122) unless otherwise indicated.

The Pending Claims Are Not Obvious Under 35 U.S.C. § 103

The Office Action rejected claims 11-16 and 18-22 under 35 U.S.C. § 103(a) as obvious in light of U.S. Patent No. 5,143,724 ("Leshchiner"), Japan Patent No. 2000230001A ("Fujita"), U.S. Patent No. 5,942,241 ("Chasin"), U.S. Patent No. 7,196,180 ("Aeschlimann"), and U.S. Patent No. 6,521,223 ("Calias"). Applicants respectfully traverse this rejection.

The Supreme Court has stated that:

> a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, it can be important to ***identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements*** in the way the claimed new invention does. This is so because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.

KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 418-19 (2007) (emphasis added).

Applicants respectfully submit that the obviousness rejection set forth in the Office Action of January 25, 2010 does not meet the standard set forth in *KSR*. In particular, the rejection merely point to known "building blocks" without "identify[ing] a reason that would have prompted a

person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does" as required by *KSR*.

Furthermore, the Federal Circuit has stated that "obviousness requires a suggestion of ***all limitations*** in a claim." *CFMT, Inc. v. YieldUp Int'l Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003) (citing *In re Royka*, 490 F.2d 981, 985 (C.C.P.A. 1974)) (emphasis added). Applicant submits that the present rejections under 35 U.S.C. § 103 do not satisfy this requirement because the cited references do not teach or suggest all the limitations of the instant claims.

Amended independent claim 11 is listed above, and recites a method using a crosslinked HA composition that is a single hydrated particle phase and that is stable in the subject for at least 8 weeks. Claims 12-16 and 18-22 depend directly or indirectly from claim 11 and thus include all the limitations of claim 11.

Applicants teach that the phrase "a single hydrated particle phase" means that "any liquid in the composition is essentially contained in the hydrated particles, e.g., there is essentially no free liquid phase" (¶ 50).

Leshchiner discloses two-phase gel slurries (Leshchiner at col. 2, lines 61-65). Fujita teaches a gel slurry (Fujita at abstract and ¶¶ 7-8), and the Office Action admits that this is not a single hydrated particle phase (Office Action at page 8). Chasin teaches "pharmaceutically acceptable augmenting agent or agents in conjunction with a local anesthetic in controlled release form that significantly increases the time period of local anesthesia when administered at a site in a patient" (Chasin at col. 5, lines 31-27). Aeschlimann discloses a "method for chemical crosslinking of high molecular weight hyaluronic acid under physiological conditions" (Aeschlimann at col. 5, lines 12-14).

None of these references teach or suggest a single hydrated particle phase of crosslinked HA particles for use in a method of tissue augmentation. Calias does not teach what these references lack.

Calias does not disclose a single hydrated particle phase

Calias discloses gels that are bioabsorbable and biocompatible (Calias at col. 4, lines 18-20 and 45-49). Calias defines the term "gel" as "a colloidal suspension of a dispersed solid phase in a continuous phase. In the context of this invention, the dispersed solid phase comprises particles of a polyanionic polysaccharide, and the continuous phase is water" (Calias at col. 5, lines 53-56).

Thus Calias discloses ***suspensions*** of hydrated polyanionic polysaccharide particles in water, not a single hydrated particle phase with no free liquid phase.

Calias also teaches the use of heat treatment "to alter the final viscosity of the gel by either causing ***more polymer to dissolve in solution***, which tends to increase the viscosity ..." (Calias at col. 3, lines 59-62; *see also* col. 7, lines 20-55). Thus Calias controls viscosity by dissolving some the polymer into a water phase surrounding the gel particles, which results in more than one phase. Furthermore, the use of the phrase "causing more polymer to dissolve" implies that ***some*** polymer is ***always*** dissolved, which means that these compositions necessarily contain more than one phase.

Thus Calias discloses ***hydrated*** polymer gel particles dispersed in water containing dissolved polymer, not a single hydrated particle phase.

Calias' material is unsuitable for tissue augmentation

As an initial matter, Calias discloses that Calias' gel is suitable for use in preventing surgical adhesions. Calias is completely silent with regard to tissue augmentation. Thus Calias provides no teaching, suggestion, or motivation to use Calias' material in a method of tissue augmentation.

One of ordinary skill in the art would not use Calias' material in a method of tissue augmentation, because Calias' material dissolves too rapidly to provide long-term persistence in clinical applications. Calias' material is described as "bioabsorbable" (Calias at col. 4, lines 18-20). According to Calias, "A 'bioabsorbable' substance is one which is maintained in the body in a relatively intact form for at least about 7 days, and is then completely absorbed by the body after about 30 days thereafter" (Calias at col. 5, lines 31-34). Calias reiterates that "The gels of this

invention remain in place for at least about 7 days, but no more than about 30 days" (Calias at col. 4, lines 14-17). .

In contrast, Applicants' material does not dissolve in water (¶ 47) and it remains stable in vivo for 8 to 12 weeks (¶¶ 113-116). This stability makes Applicants' material superior to Calias' material for methods of tissue augmentation, as Applicants' material has long-term persistence in clinical applications (*see* ¶ 116) and thus requires less frequent administration to maintain the desired augmentation effect.

The cited art, taken together, does not teach or suggest the instant claims

The previous rejections based on Leshchiner, Fujita, Chasin, and Aeschlimann were overcome and withdrawn (*see* Office Action at page 2). Accordingly, the irrelevance of these references has already been established. The cited references therefore do not render the instant claims obvious.

Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection of claims 11-16 and 18-22 under 35 U.S.C. § 103.

CONCLUSION

In view of the above remarks, Applicants believe the pending application is in condition for allowance.

A request for a three month extension of time and a request for continued examination are submitted with this response. Please charge the required fees to our Deposit Account No. 08-0219, under Order No. 0103343.00128US1 from which the undersigned is authorized to draw. Applicants believe no other fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 08-0219, under Order No. 0103343.00128US1 from which the undersigned is authorized to draw.

Respectfully submitted,

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